

Comparisons of Job Characteristics

Focus Occupation: Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111)

Associated Occupation: Occupational Health and Safety Specialists (29-9011)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 77

Focus Occupation: Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111)
Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Education and Training	9.2	15.3	12.0	<<	Extensive education and/or training may be required
Public Safety and Security	6.9	15.2	14.0	0	Current knowledge level may be sufficient
Chemistry	4.8	14.8	13.0	<	Expanded education and/or training may be required
Law and Government	5.9	13.2	12.4	0	Current knowledge level may be sufficient
Engineering and Technology	5.7	12.9	18.9	>>	Current knowledge level is likely more than sufficient
Physics	4.3	11.6	14.1	>	Current knowledge level is likely sufficient
Biology	3.7	10.0	6.2	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111)
Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Judgment and Decision Making	9.4	12.5	12.0	0	Current skill level may be sufficient
Persuasion	7.4	11.6	9.0	<<	Extensive development of skills in this area may be required
Operation Monitoring	6.6	11.2	7.9	<<	Extensive development of skills in this area may be required

Quality Control Analysis	5.9	11.2	9.7	<	A higher skill level may be required
Systems Analysis	6.5	10.6	10.6	0	Current skill level may be sufficient
Systems Evaluation	6.4	10.6	10.5	0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 98			
Focus Occupation: Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111) Associated Occupation: Occupational Health and Safety Specialists (29-9011)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Problem Sensitivity	11.1	16.1	15.3	0	Current ability level may be sufficient
Deductive Reasoning	10.6	13.3	14.1	0	Current ability level may be sufficient
Inductive Reasoning	10.2	13.2	14.3	0	Current ability level may be sufficient
Speech Clarity	10.2	12.9	11.6	<	Some improvement in abilities may be required
Speech Recognition	9.9	12.7	11.4	<	Some improvement in abilities may be required
Flexibility of Closure	7.8	10.8	10.9	0	Current ability level may be sufficient
Far Vision	7.8	10.7	10.2	0	Current ability level may be sufficient
Perceptual Speed	7.4	10.1	9.4	0	Current ability level may be sufficient
Speed of Closure	5.9	8.2	8.2	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 98
Focus Occupation: Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111) Associated Occupation: Occupational Health and Safety Specialists (29-9011)		
Work Activities	Exclusivity of Activity	
Analyze effectiveness of safety systems or procedures	87	
Communicate technical information	4	
Conduct evaluations of worker exposure to radiation or noise	95	
Develop safety regulations	74	
Evaluate manufacturing or processing systems	68	
Follow safe waste disposal procedures	50	
Inspect facilities or equipment for regulatory compliance	51	
Interpret employee's medical evaluations	92	
Perform safety inspections in industrial, manufacturing or repair setting	32	
Prepare safety reports	60	
Prepare technical reports or related documentation	22	

Recommend measures to ensure maximum employee protection	99
Test air quality, noise, temperature, or radiation	82
Understand engineering data or reports	48
Use chemical testing or analysis procedures	54
Use hazardous materials information	35
Use knowledge of materials testing procedures	70
Use pollution control techniques	62
Use scientific research methodology	21

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 78

Focus Occupation: Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (17-2111)
Associated Occupation: Occupational Health and Safety Specialists (29-9011)

Tools and Technologies	Exclusivity
Chemical evaluation instruments and supplies	10
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Fluid mechanics equipment	11
Gas analyzers and monitors	10
Indicating and recording instruments	2
Industry specific software	1
Light and wave generating and measuring equipment	4
Liquid and gas flow measuring and observing instruments	15
Metals and metallurgy and structural materials testing instruments	15
Non destructive examination equipment	13
Pressure measuring and control instruments	10
Pulmonary function testing and treatment products	24
Sampling equipment	12
Spectroscopic equipment	10
Temperature and heat measuring instruments	6

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.